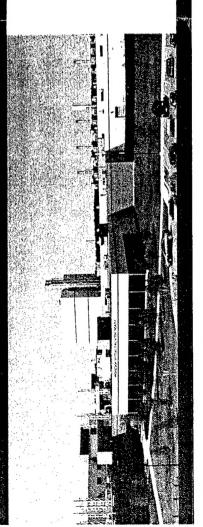
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- 55 Test Facilities
- 125 Engineering/Technical Specialists
 - Full Range Propulsion Systems Test & Evaluation

Rotor Spin Facility
Engine Outdoor Test Sites
Fuels & Lubricants Performance Lab

Gyroscopic Test Stand Variable Attitude Test Stand Helicopter Drive System Test Facility Engine Fuel Control System Test

Secondary Power Systems Fuels & Lubricants Chemistry Lab



Naval Air Warfare Center Aircraft Division Propulsion Systems Evaluation Facility (PSEF) 22229 Elmer Road, Building 2360 Patuxent River, MD 20670 (301) 757-3420, Fax (301) 757-3614 E-Mail: WeissTA @navair.navy.mil http://www.nawcad.navy.mil

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Propulsion Systems Evaluation Facility

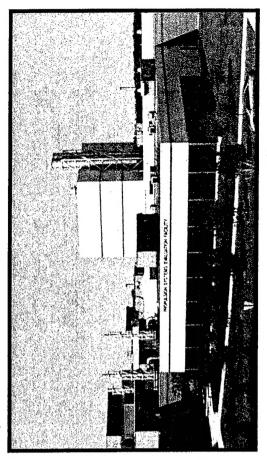
PATUXENT RIVER, MARYLAN

FUELS & LUBRICANTS

SECONDARY POWER

AIRCRAFT ENGINES

DRIVE SYSTEMS



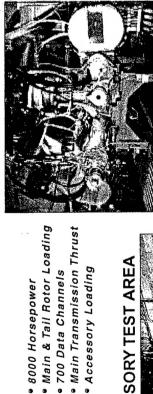


FUELS & LUBRICANTS **ABORATORY**



- Vapor Pressure
- Density & Acidity
- Foaming Tendency Surface Tension
- Chemical Stability
- Chemical Constituents
 - Viscosity
 - Distillation
- Flash Point
- Heating Value Pour Point

HELICOPTER



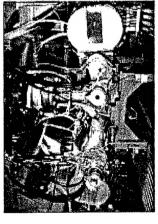
TRANSMISSION TEST

• Thrust Engine Correlation

Gyroscopic Test Loads

Outdoor Thrust Runs

· Attitude, Pitch & Roll



ACCESSORY TEST AREA

Accessory Loading

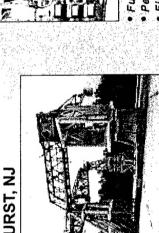
• 700 Data Channels

• 8000 Horsepower

OUTDOOR TEST SITE LAKEHURST, NJ

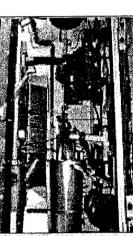
FUELS & LUBRICANTS

EST AREA



- Fuel & Lubricant Specification
- Filter & Coalescer Performance Performance Evaluations
- High Temp Lube Characteristics

UNMANNED AIR VEHICLE ALTITUDE TEST CELI



- -25°F to 125°F Air Temperature 0 - 25,000 Ft Altitudes
 - -- 80°F & 140°F Soaks
 - 530 Data Channels
- Dynometers up to 3000 HP

Drives up to 300 HP * Refueling Nozzles

FUEL COMPONENT

- Fuel Controls
- Explosion Proof
- Fuel & Air Tempering

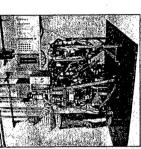
Starters & Control Valves to 600 HP

3pps., 400psig., 1200°F Air Supply

• T63 Engine Test Facility

2500°F Burner Rig

Auxiliary Power Units

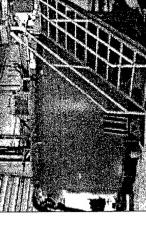


AIRCRAFT TEST & EVALUATION FACILITY



- Noise Attenuation Facility Aircraft High Power
- Night Vision
- Thrust Measurement Weight & Balance
- Wind, Rain & Heat
- T&E & Maintenance Support

ROTOR SPIN FACILITIES



- Spin Testing of Turbines & Compressors
 - 4 Chambers
- 110 in. Dia. Max 150,000 RPM
- Evacuated Heated
- 24 Hr. Ops